Focusing on…

Getting from a Shutter Click to an Image

by Diane Miller

Back in the days of film things were simple. You got what you got, especially with slide film. If you shot negative film there was that extra step of printing which allowed you some leeway in things like exposure, contrast and color balance. (So did development, to some extent).

Slide film was simple because the parameters you could control in printing negative film were built into slide film. You could choose different films for different results; Velvia had a different contrast and saturation response than Provia, etc.

It is more complicated (and wonderful) with digital. If you shoot JPEG you have a slide film situation. The sensor in the simplest pocket camera registers raw data—that’s the definition of what a sensor registers. But raw data is not an image; it is converted to an image by software in a camera or computer. You can set parameters in a camera menu for things like contrast and color balance, and these are glued into the image by the camera’s conversion to a JPEG or TIFF format. What you got is what you got. You have very little leeway to alter the image after the fact, especially for overexposed (“blown-out”) highlights.

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EXHIBITIONS, ETC.

Sorry, no Exhibitions information this month...

~ Vice President ~

Congratulations to all of us! Effective immediately, Phil Hann has accepted the position of Vice President and will, likely, be a candidate for SRPS President for 2010. I know he will do an outstanding job for all of us and I sincerely appreciate his willingness to step up and take this on. He will be formulating a document that will, hopefully, help us recruit members to vacant positions. For sure, we will need a VP in 2010 and there may be other vacancies, as well. In many cases, if we only knew someone was willing to step in and take a "job", a member who has been taking on a particular responsibility for a long time could take a break. I hope you will be ready when Phil sends you his recruitment letter.

Marcia Hart, President

~ Fair Enough? ~

If you’re interested in entering your work in any of the upcoming fair competitions, it is not too early to begin preparing. Here are some dates to note:

Marin County Fair
http://www.marinfair.org/
Dates: July 1-5th, 2009
Entries close: Thursday, May 14, 5 pm
Entry limit: six prints and 20 projected images per exhibitor

Napa County Fair
http://www.napacountyfairgrounds.com/fair.htm
Dates: July 2-5, 2009
Email: <fairnc@aol.com>
Entries close: Monday, June 15, 5:00 pm
No entry limit

Sonoma County Fair
http://www.sonomacountyfair.com/
Dates: July 28 until August 9, 2009
Entries close: Friday, June 5, 5:00 p.m.
Entry limit one entry per exhibitor per class, maximum three entries per exhibitor

ONGOING CALLS TO ARTISTS

Santa Rosa Recreation and Parks Department: Exhibits at Finley and Steele Lane Community Centers and City Hall. To apply, go to Finley Community Center, 2060 West College Avenue, Santa Rosa, to pick up an application. Community Center hours are Monday - Friday, 8:00 am - 7:00 pm and on Saturday 9:00 am - 1:00 pm. For further information, call 707-543-4512; contact is Tara Matheny-Schuster, email tmatheny_schuster@srcity.org

The Atrium Gallery at Marin General Hospital mounts four shows a year of "healing art." The gallery is looking for local artists for future shows. Previous artists have included Ernest Braun. Send slides and SASE to Wende Heath, Institute for Health and Healing, PO Box 8010, San Rafael, CA 94912.

The Art of Photography Show: The ART OF PHOTOGRAPHY SHOW 2009 is an international exhibition of photographic art which will take place August 29 through November 1, 2009 at the elegant Lyceum Theatre Gallery, located in the historic Gaslamp Quarter of downtown San Diego, California. The Opening Reception Gala will be on Saturday, August 29th, and will be a world class event!

WEBSITE: www.artofphotographyshow.com

CALL FOR ENTRIES: The Prospectus and entry details are available on the website. The online entry process is very easy, simply filling out a short registration form and then uploading your images as JPEG files. Images created via any form of photography will be accepted for consideration (i.e. shot on film, shot digitally, unaltered shots, alternative process, mixed media, digital manipulations, montages, photograms, etc.), so long as part of the image is photographically created. Entry deadline is May 22nd.
~ MISCELLANEOUS INFORMATION ~

SPRS WEBSITE
http://www.santarosaphotographicsociety.org/index.html

NEWSLETTER INFORMATION AND CORRECTIONS:
Contact Sheri Prager, Editor, The Positive Print
See SRPS roster for email address

~ Program ~

28 May 2009

A special program will be presented that will be of interest to all members. Details will be sent soon by email. Diane Miller and Elvira Lavell graciously agreed to present their scheduled program (Mats and Frames by Diane, PSA TOPS from Elvira) at a later date.

~ New Members ~

Les Kiracofe
Jan Isidorsson
Agne t a Viklund

WELCOME!

~ Calendar ~

As you may know, SRPS provides images for a calendar that is published by AJ Printing & Graphics of Santa Rosa. The club receives several hundred copies to sell, members whose images are chosen get 20 copies, and AJ uses it for promoting their business.

The partners at AJ have sent along this request for images for the 2010 calendar (below). Please note that the deadline this year is June 25th to get images to me on CD or by email. This year the AJ folks will review electronic images, so you can treat your entries for the calendar just like images you submit to our club competitions. BUT... all images for the calendar must be horizontal and in a ratio of 4:3 width to height (which is the standard 1024x768 pixels used for our competition entries).

I'll send a reminder with image specifications again soon. But I'd like you all to think about getting Sonoma County images that fit into these three categories:
- Sonoma County Events, such as the Rose Parade (in May, Santa Rosa), the Air Show, the bicycle race, the old car cruise in Santa Rosa or in Petaluma (May 14-16 in Petaluma this year)
- Sonoma County Parks, such as Putnam Park, Howarth Park (where there are barnyard animals), Armstrong Woods, and so forth.
- Nature in Sonoma County, including images of all kinds in that category.

The AJ folks anticipate naming next year's calendar "Life in Sonoma County." They would like a mixture of images from the three categories above, so we have lots of latitude for content.

Again, the deadline for entries - up to twelve for each member - is June 25th. So please think about what to shoot and what you have for this nifty calendar.

Thanks! - Jeremy
APRIL COMPETITION RESULTS

GENERAL

**Level B**
1st  Arles Sunlight          Phil Wright
2nd  High Flyer              Roger Mercer
3rd  Into the Future         Steve Lowry

**Level A**
1st  Ocean Moonset           Harold Moore
2nd  Sonoma Creek at Wingo    Bob Alwitt
3rd  Look Out Fish Here's Hugh Jim Oswald

**Level AA**
1st  Guatemalan Nun          David Henneman
2nd  Ladders Acoma Pueblo     Ruth Pritchard
3rd  Wine Country Spring     Nadine Amoss

**Level M**
1st  Calla Composition       Howard Bruensteiner
2nd  Pollinating Hippaestrium Edmond Bridant
3rd  Flower Girl             Diane Miller

CREATIVE

**Level B**
1st  Photo Haiku: Illumination Lance Plaza
2nd  No entry                Philip Hann
3rd  No entry

**Level A**
1st  Andy's Bugs             Jeremy Joan Hewes
2nd  Winter Warriors         Philip Hann
3rd  No Entry

**Level AA**
1st  Agave Jaws              Marcia Hart
2nd  Amusement               Liz Lawson
3rd  Flying Keys             Janet Gelfman

**Level M**
1st  Gull Ballet             Barbara Larson
2nd  Mexican Hat             Diane Miller
3rd  Mysterious Forest       Howard Bruensteiner

NATURE

**Level B**
1st  Elephants               Bob Walker
2nd  Giraffe Calf            Roger Mercer
3rd  Sunrise Laguna 3        Ken Hutchins

**Level A**
1st  Waterfall Near Devil's Well TJ Mills Print
2nd  Red Tailed Hawk         Bob Alwitt
3rd  Marbled Godwits at Bodega Bay Ira Gelfman

**Level AA**
1st  Sunset Oregon Dunes     David Henneman
2nd  Egret Flying Leap       Joe Simons
3rd  Great Blue Geron in Flight Marcia Hart

**Level M**
1st  Lake County Gnat        Marilyn Brooner
2nd  Osprey Landing          Tania Amochaev
3rd  Manzanita and Lichen    Russ Dieter

2008 End of Year Winners
B—Nature

“PRAYING MANITS”
BY ADELE WIKNER

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But now we have cameras that can output high quality raw data from the sensor and let you do the conversion. There are many raw converters but one of the most widely used is Adobe Camera Raw, which is in both Photoshop and Lightroom. This is my favorite, by far, for control. In Photoshop CS2 and prior versions it was limited, but in CS3, CS4 and Lightroom 2 it is just awesome.

I often hear people say something like, “I don’t want to change my images. I just want them as they came out of the camera.” That is film thinking and things are not that simple in the digital world. Raw data is not an image. It becomes an image only when you apply parameters such as the simple ones you set in the camera (contrast, saturation, color balance, etc.) or the much more sophisticated ones you can set in a raw converter.

Whether you are shooting in raw or JPEG, the image displayed on the LCD screen of your camera is a JPEG, and it reflects the settings in the camera menu. This preview image is embedded in the raw file. When you bring a raw image into Bridge or Lightroom, the preview you see first is this one, and then it changes to one with default parameters set by the application. You have probably seen this mysterious change, primarily noticeable in colors, when you first open a downloaded folder in Bridge.

The parameters you set in the camera, including color temperature and color space (sRGB vs. Adobe RGB), have no effect on a raw file. You set them in the raw converter. The color space is set as you exit the raw converter and open the image in Photoshop. You set it in CS3 and CS4 by clicking on the items underlined in blue at the bottom of the Adobe Camera Raw dialog window.

So when you get into the raw converter you are seeing an image whose appearance is determined by a generic set of parameters. Notice the sliders are always set to the same starting point. This is not “how the camera saw the image” or “how the image was recorded.” This is an arbitrary interpretation of the raw data, just to make it into a starting-point image. If you leave it this way you are not being a purist. You are being a person who isn’t utilizing what this digital stuff is all about.

You can get to a somewhat less generic setting by clicking the Auto button just above the exposure slider in Adobe Camera Raw. Sometimes that gives a pleasing image, but it is best considered a starting point for custom adjustments with the sliders.

A digital image is Provia, Velvia, Portra, Tri-X, and all the others at the same time. The power to decide is yours. And you can go back to the raw file time after time and interpret it differently each time. You can never change the raw data. It is completely safe. You change how it is interpreted. When you go back to a raw file you will see the slider positions just as you left them the last time, unless you hit Cancel on an adjustment or managed to separate the “sidecar” .xmp file where the conversion information is stored from the folder containing the raw file. And in Lightroom you can store several “virtual copies” of different conversion settings for an image.

So have at the sliders in Camera Raw. You will first be in the General tab. Work from top to bottom and then go back and tweak if necessary. You can recover significant amounts of blown out highlight detail with the Exposure and Recovery sliders. You can reduce blocked-up dark tones with the Blacks slider and then lighten dark tones with the Fill Light slider (think fill flash). Then explore the tabs to the right of the General tab. The third one offers the best way to clean up noise, the fourth one gives you complete control over color and the seventh one gives you camera profiles, specific for the camera that made a given image (read from the Metadata). These profiles are built into CS4 and downloadable with CS3 for cameras that were current before CS4.

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A lot of people worry about how far you can go without “changing the truth” of the image. You are not adding things to the image but rather bringing out hidden potential. The camera has captured things that are not revealed in the default settings.

Here is an image as it first appeared in Camera Raw, and then after I cropped and adjusted the sliders to my liking. This is just Camera Raw. No Photoshop. And I could have gone much further.

And here is another image showing how it appeared in Camera Raw and then after I brought it into the digital darkroom and “printed” it. (The settings in a raw converter are analogous to what you can do in a wet darkroom, but on steroids.)

Other than some cloning, did I change the “truth” of this image? I did some cropping and perspective correction. I could have done that with a view camera if I wanted to lug around heavy, bulky equipment and spend half an hour setting it up. I did some sophisticated color and tonal correction. I could have done that in a wet darkroom (even a color one) if I were willing and able. Is it less truthful or honest or worthwhile to do it much more easily in the digital darkroom?

The line in the sand for preserving the truth of an image is one you must draw for yourself. Just be aware that it isn’t meaningfully drawn by any built-in parameters in the camera or in a raw converter. For that matter, is it drawn meaningfully by the built-in parameters for any type of film?
~ FIELD TRIPS 2009 ~

SUNDAY, 17 MAY FIELD TRIP
ANGEL ISLAND FIELD TRIP

Beginning some 2000 years ago, Angel Island served as a hunting ground for the Miwok Indians. In 1863, during the Civil War, a camp was established to protect San Francisco Bay. In 1891, during the Spanish American War, a quarantine station was opened. In addition, it served as a discharge depot and recruitment processing center during World War II, an Immigration Station often referred to as "The Ellis Island of the West" from 1910 through 1940, and a Nike Missile Base from 1955-1962.

The Island is 740 acres in size and the highest point is Mt. Livermore at 781 feet. From the top of Mt. Livermore there is a 360 degree view of the Bay, San Francisco, Sausalito and Tiburon. On a clear day you can also see the Golden Gate Bridge, San Francisco/Oakland Bay Bridge, Richmond/San Rafael Bridge, San Mateo Bridge and the Dumbarton Bridge.

We are planning to take the Ferry from Tiburon over to the Island. The cost of the ferry is $13.50 for adult (regardless of age). If you want to bring your bike over on the ferry it will cost $1.00 extra. There is a motorized tram tour on the Island which costs $12.50 for adults and $11.50 for seniors. It appears that there is a tram tour scheduled for 12:00 noon and the tram tour takes about an hour. There is a Segway tour which takes about two hours and costs $65.00. For those arriving by boat (not ferry), the dock is open from 8 AM to sunset and costs $10 a day.

The current thinking is that we will take the 11:00 AM ferry over and plan to have a picnic lunch (there are picnic tables close to where the ferry comes in) and then everyone may explore the Island on their own time schedule and by whatever mode of transportation they wish. The Cove Café serves food and drink including microbrew beers for our Ale Fellows. You can rent bikes at the café for $10 an hour or $35 for the day. The last ferry back to Tiburon leaves the Island at 5 PM and you must not miss that Ferry.

The weather may be variable on the Island. On one side it may be warmer and on the other it may be cooler so dress in layers. There is poison oak and there are ticks on the Island. Stay on the trails to avoid exposure as much as possible to these things. Do not feed the raccoons and do not remove anything from the Island.

WE WILL DO A FINAL ANNOUNCEMENT ABOUT THE TIME OF DEPARTURE FROM SANTA ROSA BY E-MAIL AND ON THE FORUM - FIELD TRIP SECTION ON MAY 4. PLEASE CHECK TO MAKE SURE YOU HAVE THE CORRECT INFORMATION.

THE SIGN UP BINDER FOR ALL FIELD TRIPS FOR 2009 IS ON THE SIDE TABLE AT EVERY MEETING. PLEASE NOTE IF YOU PLAN TO BRING FAMILY AND/OR FRIENDS WITH YOU.
Howard Bruensteiner
I'm sure this is not a new idea but I don't remember it being discussed here. We all have our ways of improving sharpness. Some methods don't compromise image quality like the use of image stabilizing lenses or propping the camera against a firm surface. Other methods such as higher ISOs and/or underexposure, which can be later compensated for in Photoshop, do reduce quality but this is a cost we are willing to pay to get the image.

This idea doesn't compromise quality, it just relies on probability. We all know the formula that says that without image stabilization we "should" use a shutter speed that is the reciprocal of the focal length. To get an acceptably sharp image at 400mm (in 35mm full frame terms) we "should" expose at 1/400 of a second... which of course is not always possible.

Just looking thought the camera with a 400mm lens attached we can see the shaking in our hands as we tremble trying to hold it steady in anticipation of pressing the shutter button. But once our muscles are committed to movement the tremor is reduced. Unfortunately the reduced tremor begins after the image has been taken.

Try setting your camera to shoot some small text on a magazine cover at perhaps 1/60 or even slower with a 300mm or higher telephoto lens. Position yourself far enough away so that the text is just a small part of the image. Then shoot perhaps 6 exposures one at a time trying to hold the camera as steady as possible for each exposure. You may get an acceptably sharp image by chance. The larger the sample of course the greater your chances of catching sharpness. But then try setting your camera's drive setting to a high speed burst of exposures. And hold the shutter button down for about 6 exposures.

I tried this with about 10 bursts and only once did I fail to get a pretty sharp image. Often there were two.

Diane Miller
I've read about this method, and tried it with some success. I never heard the explanation about the tremor being reduced by commitment to motion, but with a delayed effect. That would explain it. I'll now try it more often, with a good explanation to justify it. Thanks!

Howard Bruensteiner
Certain types of tremors are reduced with purposeful movement. Perhaps the very normal and minor tremor we all have to some degree when we try to hold still is in that category. I didn't do any medical research to present this, so I'm only speculating.

The reduction I experience is immediate but not instantaneous. The first exposure happens too quickly to be affected.

Howard Bruensteiner
This method will of course increase memory usage and add to our editing tasks with so many more images to review, but the image review function in some cameras (my 50D does this) allows us to magnify the view and then holds the magnification while scrolling though the images. I can spot the bad vs. the good ones easily and just delete as I go.

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Howard Bruensteiner
Here’s another idea a friend shared with me. He said:

“...when I couldn’t use a monopod, I had a rope that was attached to the tripod hole. I stood on the rope and pushed up on the camera when I fired. Gained about two shutter speeds this way.”

Interesting.

Greg Gorsiski
We talked about this string version a few years ago here on the forum. I made one, keep it in my bag. Works pretty good.

Howard Bruensteiner
Well, I took some sample pictures today and I think the only thing I was able to prove was that the more pictures you take the better your chances of getting a sharp one. But you can get one that’s pretty sharp.

Of course, this small batch of photos is not statistically significant. As it happened I managed to get a single image that was pretty sharp in both my batch of six hand held single exposures as well as in my batch of ten burst images. In my trials the day before I found it much easier to get a sharper image using the burst method. The sharpest burst image here is still sharper than the sharpest image exposed individually. And, if you look at the complete sets of images you’ll see that most of the burst images are sharper than the images taken one at a time. At 1/125 this might have been offered more usable sharp examples.

These were all taken with a Tokina 80-400mm lens that does not have image stabilization. All images (except the hand held batch taken at f8, 1/350, ISO-800) were taken at f-9.5, 1/45th, and ISO 100. The lens was cranked out to 400mm and the exposure was manually set to avoid exposure variation. Also, autofocus was turned off after the initial focus was set by the camera.

So you can get a better feel for the degree of magnification the first image is the entire scene resized to 800 pixels wide. All of the other images are a crop of the actual pixels from the jpeg files the Canon 50D generated. No editing or resizing at all was done.

This first sample was taken using a tripod using mirror lock up (MLU) and a 2 second shutter delay which theoretically would be the sharpest image I could hope to obtain with this set-up:
And here is an actual pixel crop from the above image:

This next is a second exposure taken exactly the same way... but even with all the sharpness maximizing technique used here it isn't exactly the same quality as the first image:

I'll present the sharpest images obtained with each method first. If you wish to scroll further you can see the rest of the attempts. The method is shown on each image:

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Here are the full sets of exposures. The next six are all hand held where I tried to take a single shot as steadily as possible:

Next, these nine were taken in high speed burst mode:

(continued on page 12)
Perhaps you didn't need to see all of these but it demonstrates how hard it is to get a sharp 400mm image at 1/45 as well as the fact that you actually can get one if you try enough... bearing in mind that sharpness is a relative term. The "sharp" ones here may be usable but none of them are critically sharp.

This last group is a set of images using the rule that says you can get a sharp image using an exposure that is the reciprocal of the focal length. Unfortunately I forgot about the 1.6X factor using the smaller sensor in the 50D and I shot these hand held at 1/350 instead of the 1/750 the effective focal length would specify using this rule.

Drew Jackson
Interesting theory, but I am sticking with my technique of jamming myself and my camera against some stationary subject.
Thanks for giving us something new to think about Howard.

Howard Bruensteiner
Absolutely. Any available way of increasing stability would help. Given a building, or a pole, or a tree, and a subject that gives me time to position myself, I'll do that too... in combination with this idea. After a few months I'll have a better idea how this works in the real world.
I was a liberal film shooter, but even so I just have to COMPLETELY get over the established instinct that I need to conserve "film".

Drew Jackson
Man, do I understand this! When I went digital and had high speed motor drive capabilities I thought I would shoot multiple copies of everything and anything. Then I discovered the time it takes to view and reject a large quantity of images. Now I am as frugal with digital as I used to be with film. I make sure I GOT the image, but I definitely don't want ten of the same.

Howard Bruensteiner
Drew, How do you know you GOT the shot? If it's a fleeting moment of local people taken from a moving boat, how do you know?

I'll see how this burst method can be done in a practical way. In my brief experience I found it easy to delete the unsharp ones in-camera right after took them. But while traveling this could interfere with enjoying the experience of being wherever you are. I definitely think I'll be deleting in-camera before downloading images from a card. Scrolling through them on the camera's screen is really simple, and since all the images in a burst are virtually the same it's easy to compare them quickly. Also, I'll only do this in those situations where sharpness is questionable.
(continued on page 13)
Greg Gorsiski
That's why I like an Image Tank in the field. It still fits in my photo vest easy. It's way bigger than my in-camera viewer, I have full histogram displays, I can zoom in even further and I don't have to copy them from the memory card unless I want it. The displays are generally much brighter as well. Pull my card from my camera, pop it into my tank and view and delete. Then I use my image tank to transfer the pre-picked version to my computer later.

I run 3 4GB cards. One in my camera, one in my tank, one extra. If I have down time, I can be viewing my images in my tank, but my camera is at the ready with another card.

If I'm really concerned, I will use my laptop which is in my car or hotel room. My Tank is 80GB, so I can just load up that in the field and not worry about it until later. With 80GBs in my pocket, and 12GB of memory cards. I can shoot all I want, but I usually take the time before getting to my computer for a quick-delete pass.

But like Drew, I'm doing better now that I'm shooting less. But I'm still trashing at least half of what I shoot. On a 300 picture shoot, if I keep 50. I'm happy. But those 50 are usually the only ones that make it to my computer. I'm not overwhelmed when I get there. It feels manageable instead of sitting down to a 500 image session.

Drew Jackson
Don't get me wrong . . . there are times that call for multiple images. You pointed out one of these times. When I was traveling by boat in Vietnam and Cambodia, the motor drive was on and I was hammering it. People images are really tough. The only way one can be sure is to have lots of images . . . and even then it is a crap shoot.

The image tank is a really cool tool. I am saving my pennies for one of those.

Butch Conner
I have been using this method for a while now, especially for moving objects. 500 to 1000 images can be very overwhelming but I have been frustrated by trying to be conservative in the past and missing the shot. Until I figure out a way to be sure it's sharp and still be conservative, it's machine gun kelly for action shoots.

Gary Saxe
Thanks Howard. I use this method when I photograph wildlife when a tripod is not appropriate. I usually set my Nikon D200 at 5 frames per second and set my shutter at a high shutter speed. Although, I have never thought of it as a method.

A method that I use that no one has mentioned is a good stance when no sturdy support is available. I use a good hunters stance. Hold your elbows against your body and use your left hand to support the barrel of the lens. Set your left foot pointing forward and your right at almost 90 degrees behind the left foot, about 16 to 18 inches. Suspend breathing momentarily as you press the shutter release. This is how someone gets the best accuracy when shooting a rifle while standing. It works good for me when I use a long lens.

Now, Help me get a good focus while burst shooting with a good stance. This is where I have the most problems.

Howard Bruensteiner
There are two concepts being discussed here... capturing a sharp image of a still subject, and capturing a good stop of a moving subject with legs or expressions constantly moving into attractive and awkward positions.

Of course we should try to do whatever we can in either circumstance but the moving object is still more of a crap shoot. If only one of the five hand held exposures turns out sharp the chance of it coinciding with the best stop of subject movement is still statistically more out of range.

I'll note that my hand held positioning of my single exposure trial images did use many of the Gary's suggestions. And still the sharpness was infrequent. But we all have various amount of hand tremor.
Ansel Adams: The Photographer’s Life
A Slide Lecture by Mary Street Alinder

Thursday, May 7th at 7pm
$10 General/
$8 Seniors, Students/
$5 Members
Reservations required as space is limited.

Mary Street Alinder spent 5 years shadowing Ansel Adams during which time she helped him write his autobiography. They worked very closely and he proved to be an unfailing mentor. A highlight of this presentation is Adams’s time in Sonoma County, with a number of pictures he made here illustrating the great beauty he found in our hills, fog, shore, and ocean. Alinder will share an insider’s perspective on one of America’s greatest artists, as well as a rare recording of Adams, a trained classical pianist, performing Beethoven’s Moonlight Sonata as a finale.

Connecting Sonoma County’s history with art and culture.

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